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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/402,968	01/12/2000	JOHN PAUL RONALDSON	UD&LP035	6691
22434	7590	03/25/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			JONES, HUGH M	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/402,968

Applicant(s)

RONALDSON ET AL.

Examiner

Hugh Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/5/2000; 6/3/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-29 of U. S. Application 09/402,968, filed 01/12/2000 are presented for examination.

#### **Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 and dependent claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning of "dummy version" is unclear.
4. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "and/or" renders the claims indefinite.
5. The term "slight variations" in claim 12 is a relative term which renders the claim indefinite. The term "slight" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The dependent claims inherit the defect.
6. Claim 1 recites the limitation "*unknown* source". There is insufficient antecedent basis for the source being 'unknown' in the claim. The dependent claims inherit the defect.

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7. Claim 1 recites the limitation "*source(s)*" in limitation ii of claim 1. There is insufficient antecedent basis for the source being plural in the claim. The dependent claims inherit the defect.

8. Claim 2 recites the limitation "*the first* trial solution". There is insufficient antecedent basis for any trial solutions in the claim. The dependent claims inherit the defect.

9. Any other claims with the same language as noted above also inherit the defect and are rejected.

**Allowable Subject Matter**

10. Claims 1-29 are allowed over the prior art of record, and will be allowed once all outstanding rejections/objections are traversed.

11. The calibration of neutron detectors is well known in the prior art. The closest art of uncovered appears to be:

- Kawasaki et al. (of record) disclose moving a neutron radiation source in order to determine the strength of the radiation. See page 5, line 12 to page 6, line 23; page 19, line 19 to page 20, line 15.

- Hurst et al. disclose a radiation detector simulator, including the capability to simulate the distance between the radiation source and the detector. In particular, Hurst et al. disclose a health physics instrument simulator system permitting an operator to simulate measurement of radiation levels of a plurality of radiation types includes a memory for storing first data corresponding to an n-dimensional training space representing a predetermined physical location,

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second data defining a radiation source including source strength, source type and source location with respect to the training space and radiation intensity data based on the second data, where each of the radiation intensity data corresponds to one respective location in the training space, a selecting device for selecting a predetermined simulated radiation sensing instrument, a pointing device for identifying a location within the training space defining a current location of the simulated radiation sensing instrument and a display for displaying both an instrument display corresponding to the simulated radiation sensing instrument and radiation intensity data corresponding to the current location in the training space. Methods for operating a health physics instrument simulator system including a computer and a display are also disclosed. See col. 3, line 14 to col. 4, line 3.

12. However, the cited prior art does not appear to disclose or suggest the claimed invention as expressly recited, especially adjusting the model source location and/or activity to reduce the difference between the predicted and actual detection rates, in the context of the claims.

**13. Any inquiry concerning this communication or earlier communications from the examiner should be:  
directed to:**

Dr. Hugh Jones telephone number (703) 305-0023, Monday-Thursday 0830 to 0700 ET, **or** the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704. Any inquiry of a general nature or relating to the

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status of this application should be directed to the Group  
receptionist, telephone number (703) 305-3900.

**mailed to:** Commissioner of Patents and Trademarks


Washington, D.C. 20231

**or faxed to:** (703) 308-9051 (for formal communications intended for entry) **or**  
(703) 308-1396 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT").

Dr. Hugh Jones

Primary Patent Examiner

March 19, 2005

  
HUGH JONES, Ph.D.  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 2100